Listing of Claims

This listing of claims will replace all prior versions of claims and listings of claims in the application:

1.   (Currently Amended) A monitoring system for distributed utilities, the monitoring system comprising:

a.   a water purification device for converting available water to purified water, the water purification device characterized by a plurality of operating parameters;

b.   an input sensor for measuring source water input to the water generation device;

c.   an output flow rate sensor for measuring consumption of purified water output from the water purification device;

d.   a local controller for concatenating measured source water input and consumption of purified water output on the basis of the input and output sensors; and

e.   a remote controller for modifying operation of the ~~purified~~ water purification ~~generation~~ device based on the concatenated measured source water input and consumption of purified water output.

2.   (Previously Presented) A monitoring system according to claim 1, further comprising at least one sensor for measuring at least one parameter of the plurality of operating parameters of the water purification device.

3.   (Previously Presented) A monitoring system according to claim 2, wherein the at least one sensor is a heat transfer monitor.

4.   (Previously Presented) A monitoring system according to claim 2, wherein the at least one sensor is a flow impedance monitor.

5.   (Cancelled)

6.   (Previously Presented) A monitoring system according to claim 1, wherein the input sensor is a flow rate monitor.

7.   (Previously Presented) A monitoring system according to claim 6, wherein the output flow rate sensor includes a water quality sensor including at least one of a turbidity, conductivity, and temperature sensor.

8.   (Previously Presented) A monitoring system according to claim 7, further comprising a shut off switch that automatically turns off the water purification device when the water quality sensor rises above a pre-programmed water quality value.

9.   (Previously Presented) A monitoring system according to claim 7, further comprising an alarm that alerts a user when the water quality value rises above a pre-programmed water quality value.

10.   (Original) A monitoring system according to claim 7, further comprising a remotely operable shut off switch.

11.   (Cancelled)

12.   (Cancelled)

13.   (Cancelled)

14.   (Original) A monitoring system according to claim 1, further comprising a telemetry module for communicating measured input and output parameters to a remote site.

15.   (Original) A monitoring system according to claim 14, wherein the telemetry module is a cellular communications system.

16. (Original) A monitoring system according to claim 14, wherein the telemetry module is a wireless system.

17. (Previously Presented) A monitoring system according to claim 1, further including a remote actuator for varying operating parameters of the water purification based on remotely received instructions.

18. (Original) A monitoring system according to claim 1, further including a self-locating device having an output indicative of the location of the monitoring system.

19. (Original) A monitoring system according to claim 18, wherein the self-locating device is a global positioning system.

20. (Original) A monitoring system according to claim 18, wherein monitored characteristics of input and output depend upon the location of the monitoring system.

21. (Previously Presented) A method for assembling a monitoring system comprising:

    a. providing a water purification device;

    b. coupling an input sensor for measuring source water input to the water purification device;

    c. coupling an output sensor for measuring consumption of purified water output from the water purification device; and

    d. coupling a local controller to the input and output sensor for concatenating measured source water input and consumption of purified water output on the basis of the input and output sensors; and

    e. providing a remote controller for modifying operation of the water purification device based on the concatenated measured input and consumption of output.

22. (Previously Presented) The method of claim 21, further comprising:

    a. providing communication between a telemetry module and the controller; and

b. providing communication between the telemetry module and a monitoring station.

23. (Previously Presented) A distributed network of utilities, comprising:

a. at least one water purification device for converting source water to purified water;

b. input sensors for measuring inputs to the at least one water purification device;

c. output sensors for measuring consumption of output from the at least one water purification device, wherein the at least one water purification device has a local controller that concatenates the measured input and consumption of output from the at least one water purification device;

d. a telemetry transmitter for transmitting input and output parameters of the at least one water purification device; and

e. a remote controller for receiving the concatenated input and consumption of output from the at least one water purification device and modifying operation of the at least one water purification device based on the concatenated input and consumption of output.

24. (Withdrawn) A method for providing distributed utilities, the method comprising:

a. providing a generator to a user;

b. monitoring at least one index of generator usage to supply a utility; and

c. charging the user on the basis of the index of generator usage.